Attachment 1 **Second Quarterly Mixing Zone Report** March 4, 2005

Dischargers in the North Coast Region with the Potential for Requesting a Mixing Zone under the **Proposed Policy**

Twenty-six permittees in the North Coast Region have been identified preliminarily as possible candidates for a mixing zone. Thirteen are located in the Russian River Hydrologic Basin, eight are located in the Eel River Hydrologic Basin, two are identified in the Mad River Hydrologic Basin, and two are located in the Humboldt Bay drainage area. Following is a brief description of each discharger.

Russian River Dischargers

Sonoma County Water Agency Occidental County Sanitation District Facility:

NPDES Permit #: CA0023051 5/27/1998 Permit Expiration Date: Average Dry Weather Flow: 0.05 mgd

Description: Existing facilities include secondary treatment utilizing an

> aerated pond, a settling pond, and disinfection. Final effluent is discharged to a 35-acre foot reservoir with releases from the pond to Dutch Bill Creek, a Russian River tributary, during the winter, and releases to irrigation

during the discharge prohibition period.

Monitoring for priority toxic chemicals has been conducted. A cursory SIP Monitoring:

reasonable potential analysis indicates that the facility has the potential

to exceed CTR criteria for lead, silver, zinc and

dichlorobromomethane. An assessment of the dioxin data is still

underway.

Facility: City of Cloverdale Wastewater Treatment and Disposal

Facilities

CA0022977 NPDES Permit #: 5/22/2001 Permit Expiration Date: Average Dry Weather Flow: 0.05 mgd Peak Wet Weather Flow: 0.66 mgd

Description: Existing facilities provide secondary treatment consisting

> of aerated ponds followed by a settling pond, chlorination, evaporation/percolation ponds and dechlorination. The existing NPDES permit allows the discharge of advanced treated wastewater to the Russian River during the period October 1 through May 14 at a rate of 1% of the flow of the Russian River as measured near Cloverdale (USGS gauge No. 11-4630.00). However, the facilities necessary to provide advanced treatment have not been constructed, and the primary means of wastewater disposal at the facility has

adjacent to the Russian River.

SIP Monitoring: Monitoring for priority pollutants has been conducted. A draft

Reasonable Potential Analysis indicates that the facility has the

been by means of seven evaporation/percolation ponds

potential to exceed CTR criteria for copper, mercury, 2,3,7,8 TCDD, chlorodibromomethane, and dichlorobromomethane.

Facility: U.S. Army, Corps of Engineers, San Francisco District and

California Department of Fish and Game Warm Springs

Fish Hatchery

NPDES Permit #: CA002435
Permit Expiration Date: 08/26/2002
Average Dry Weather Flow: 15.5 mgd

Description: Description: Wastewater from the rearing facility is discharged into a

pollution control pond, and thence to either Dry Creek or used for landscape irrigation of an adjacent visitor center and day use area. There is no monitoring of discharge flows to Dry Creek, and the discharge is year-round.

SIP Monitoring: Monitoring for priority toxic pollutants indicated a possible

exceedance of the criterion for copper.

Facility: U.S. Army Corps of Engineers, San Francisco District and

California Department of Fish and Game Coyote Valley

Fishery Mitigation Facility

NPDES Permit #: CA0024791
Permit Expiration Date: 8/26/2002
Maximum Flow: 7.11 mgd

Description: The facility is designed to raise 40,000 steelhead smolts.

Influent consists of water released from Coyote Dam. Wastewater generated at the facility from spawning and rearing of fish is discharged to the East Fork Russian River.

When the rearing raceways are cleaned, the water is diverted to a sedimentation pond. Water from the sedimentation pond is discharged to the fish ladder. The facility discharges for approximately one month a year,

during wet weather.

No monitoring is available.

SIP Monitoring: No monitoring is available.

Facility: City of Ukiah Wastewater Treatment Plant and Disposal

Facilities

NPDES Permit #: CA0022888
Permit Expiration Date: 9/21/2004
Average Dry Weather Flow: 2.8 mgd
Peak Wet Weather Flow: 7.0 mgd

Description: The facilities provide advanced wastewater treatment

including grit removal, primary sedimentation, trickling filters, secondary sedimentation, coagulation, filtration, chlorination, dechlorination, biosolids digestion and dewatering. During the winter months from October 1 through May 14, when there is sufficient river flow, effluent is discharged to the Russian River. During the

summer months, effluent is discharged to three

evaporation/percolation ponds.

SIP Monitoring: Monitoring for priority toxic pollutants has been conducted.

Reasonable potential analysis has not been completed.

Facility: City of Santa Rosa, Laguna Subregional Wastewater Treatment, Reuse,

and Disposal Facilities

NPDES Permit #: CA0022764

Permit Expiration Date: 3/1/2005 and 3/15/2005

Average Dry Weather Flow: 19.2 mgd

Description: The City of Santa Rosa operates the Laguna Subregional

Facilities, which serve the communities of Cotati, Rohnert Park, Santa Rosa, Sebastopol, and the unincorporated South Park County Sanitation District. The facility is designed to provide advanced treatment including grit removal in preaeration tanks, sludge and scum removal in primary sedimentation tanks, biological treatment (including nitrogen reduction) with coagulation, flocculation, sedimentation, and clarification followed by filtration, and ultraviolet light disinfection. Reuse and disposal of all advanced treated water is through a system combining water reclamation, including discharge to the Geysers Recharge Project, which translates to an average daily

West Creek and the Russian River during the allowable discharge period of October 1 through May 14.

SIP Monitoring: Monitoring for priority toxic pollutants has been conducted.

A Reasonable Potential Analysis indicates that the facility has the potential to exceed copper, lead, mercury, nickel, cyanide, and beta-endosulfan. Regional Board staff also have concern regarding the potential to discharge gamma-

delivery of 11 mgd, with discharge to the Laguna de Santa Rosa and Santa Rosa Creek which are tributary to Mark

BCH (lindane).

Facility: Town of Windsor Wastewater Treatment, Reclamation, and Disposal

Facility

NPDES Permit #: CA0023345
Permit Expiration Date: 1/24/2007
Average Dry Weather Flow: 2.24 mgd
Peak Wet Weather Flow: 7.2 mgd

Description: Facilities include biological secondary treatment utilizing

extended air activated sludge aeration basins and secondary clarifliers; advanced wastewater treatment that includes chemical addition facilities, flocculation tanks, clarifiers,

and sand filters; disinfection; and storage prior to

reclamation and/or disposal. The disinfection facilities have recently been upgraded from the use of chlorine gas to ultraviolet radiation. The Permittee is required to maximize recycled water in order to minimize discharge to receiving waters. Advanced treated wastewater is discharged from the effluent storage pond system to Mark West Creek during the allowed discharge period from October 1 to May 14. Long-term plans include reclamation of advanced

treated effluent to the Geysers pipeline.

SIP Monitoring: Monitoring for priority toxic pollutants has been conducted.

Reasonable potential analysis has been conducted, and exceedances of some criteria have been indicated. Chemicals of concern include copper, mercury, 2,3,7,8

TCDD, chlorodibromomethane, and

dichlorobromomethane.

Facility: Mendocino Forest Products Company, LLC, Ukiah

Sawmill Complex

NPDES Permit #: CA0005843
Permit Expiration Date: 9/26/2007

Average Dry Weather Flow: Not specified in the permit.

Description: The facility supports lumber manufacturing, treatment, and

storage, a log yard, and sawmill. Log deck sprinkler water runoff can only be discharged. The log deck water is collected in a pond and then recirculated. During periods of heavy rain, the pond occasionally overflows and

discharges into Hensley Creek

SIP Monitoring: Monitoring for priority pollutants has been conducted. A

cursory analysis of the potential for the facility to exceed CTR criteria indicates that there is no reasonable potential

for exceedances.

Facility: Russian River County Sanitation District and Sonoma

County Water Agency Wastewater Treatment and Disposal

facility

NPDES Permit #: CA0024058
Permit Expiration Date: 11/5/2008
Average Dry Weather Flow: 0.71 mgd
Peak Wet Weather Flow: 1.2 mgd

Description: Treatment facilities include wastewater screening and grit

removal, biological secondary treatment using extended air activated sludge aeration basins and secondary clarifiers; advanced wastewater treatment that includes chemical addition facilities, and sand dual-media filters; and

disinfection. The Permittee is currently in the design phase of a project to upgrade the facilities to provide an increase in treatment capacity to 1.8 mgd. Advanced treated effluent that is not reclaimed to the recycled water system is

discharged from the effluent storage pond system to the Russian River during the allowed discharge period from October 1 to May 14. The rate of discharge is governed by

flow conditions in the Russian River as measured at the United States Geological Survey gauge at the Hacienda Bridge and is limited to one percent of the natural flow in the river.

SIP Monitoring:

A reasonable potential analysis has been conducted. Results indicate that dichlorobromomethane has a reasonable potential to exceed State water quality standards, requiring a numeric Water Quality Based Effluent Limit for this constituent. An infeasibility study submitted on October 13, 2003 concluded that it is infeasible to immediately comply with the final effluent limitations for dichlorobromomethane. The permit sets forth a compliance schedule and interim requirements, including an interim effluent limitation. The interim limitation for dichlorobromomethane is based on current treatment plant performance. Tasks to be performed by the Permittee include implementation of source identification program and completion of a study of alternative disinfection processes that may reduce the formation of this pollutant. Data (1994-1996) for priority toxic pollutants also indicate some isolated exceedances of criteria for copper, lead, benzo (a) pyrene, chlorodibromomethane, and heptachlor epoxide. However, more recent testing (November 2002 and February 2003) indicates that these priority pollutants are non-detect or detected but not quantified in the treated effluent. The Permittee will be required to conduct additional sampling to determine if a reasonable potential analysis for these pollutants will be required.

Facility:

Sonoma West Holdings, Incorporated Wastewater Treatment Facility,

Plant No.2 CA0023655 11/5/2008

5,000 gpd, with 173,000 during peak harvest month

368,000 gpd

Permit Expiration Date: Average Flow: Peak Daily Flow: Description:

NPDES Permit #:

The facility serves a multi-tenant food and beverage processing, packaging, storage and warehouse. The facility's wastewater treatment and disposal systems are comprised of a domestic wastewater treatment system that serves peak flows of 6,000 gpd and an average flow of 2,720 gpd, and a process wastewater treatment and disposal system. The domestic wastewater treatment system includes four septic tanks, an aerated domestic wastewater pond and a spray irrigation system. The Permit does not authorize the discharge of treated domestic wastewater to receiving waters. Process wastewater treatment includes a collection system, screening, settling, oil and grease removal, overland flow, an aerated primary treatment pond, and an aerated storage pond. Process wastewater and cold storage defrost water are discharged to Barlow Creek, tributary to Atascadero Creek, tributary to Green Valley Creek, and thence to the Russian River.

SIP Monitoring: Based on analysis of effluent samples collected on

November 14, 2002, and March 17, 2003, the discharge has a reasonable potential to cause in-stream excursions above applicable water quality standards for cyanide, selenium,

copper, zinc, cadmium, and nickel.

Facility: Graton Community Services District Wastewater

Treatment, Reclamation, and Disposal Facility

NPDES Permit #: CA0023639 Permit Expiration Date: 10/6/2009 Average Dry Weather Flow: 0.14 mgd Peak Wet Weather Flow: 0.85 mgd

Description: Facilities include two influent pumping stations, two

aerated ponds, a settling pond, a chlorine disinfection system, and dechlorination prior to discharge to two effluent storage ponds. The Permittee is currently

evaluating the method that will be used to comply with the Basin Plan requirements for advanced wastewater treatment (AWT). The permit established AWT effluent limitations

for discharges to Atascadero Creek in the event the Permittee determines that its goal of zero discharge is not

practical.

SIP Monitoring: A reasonable potential analysis indicated exceedances of applicable

water quality standards for copper, lead, zinc, and

dichlorobromomethane. Final WQBELs were calculated with no dilution credit for copper, lead, and zinc, based on the freshwater aquatic life criterion and for dichlorobromomethane based on the human health criterion. Regional Board staff has a concern regarding the potential to discharge cyanide and chloroform. The permit contains a compliance schedule for achievement of the final priority pollutant limitations and requires monitoring for cyanide and chloroform.

Facility: Forestville Water District Wastewater Treatment, Reclamation, and

Disposal Facility

NPDES Permit #: CA0023043 Permit Expiration Date: 10/6/2009 Average Dry Weather Flow: 0.10 to 0.130 mgd Maximum Daily Flow: 0.58 mgd

Description: The facility provides advanced wastewater treatment

employing microfiltration, new headworks, a rotary hydroscreen system, a screening washer, a metering flume, an aeration pond, a settling pond, a prefilter pump station, and a new chlorine contact chamber. Treated, disinfected, dechlorinated effluent may be discharged from the effluent storage pond to Jones Creek, a tributary to Green Valley Creek, during the period from October 1 to May. 14. Green Valley Creek is tributary to the Russian River. In addition, treated, disinfected, dechlorinated effluent utilized for frost

protection at the Iron Horse Vineyards may runoff as sheet

flow to Green Valley Creek during the allowed discharge

period from October 1 to May 14.

SIP Monitoring: A study conducted by the Permittee concluded that it is

infeasible to immediately comply with the final effluent

limitations for copper, lead, zinc, and

dichlorobromomethane. The Permit has a compliance schedule for achievement of the final priority pollutant effluent limitations identified. There is insufficient data to complete the reasonable potential analysis for chloroform and cyanide, and additional monitoring is required for these

constituents.

Facility: City of Healdsburg Wastewater Collection, Treatment and Disposal

Facility

NPDES Permit #: CA0025135
Permit Expiration Date: 10/6/2009
Average Dry Weather Flow: 1.4 mgd
Peak Wet Weather Flow: 6.5 mgd

Description: Waste treatment facilities include wastewater screening and grit

removal, biological oxidation/sedimentation ponds and disinfection. Treated wastewater is disinfected using chlorine gas. The effluent is not currently dechlorinated before discharge. The Permittee intends to install a dechlorination process (if it has not done so already). The treated wastewater discharges to a gravel pit in alluvial deposits of sand and gravel adjacent to the Russian River. These deposits are part of a groundwater aquifer that supplies domestic and agricultural well water. The Permittee is currently conducting environmental review for two alternative treatment technologies to upgrade the existing treatment facilities to provide advanced wastewater treatment; conventional extended aeration with biological nitrogen removal, and tertiary filtration; and a membrane bioreactor with biological nitrogen removal.

The project will also consider the feasibility and the potential environmental impact of alternative discharge locations, as well as

agricultural and urban re-use alternatives.

SIP Monitoring: The renewed permit contains a schedule for compliance with the

criteria for priority toxic pollutants, including copper, lead, zinc, and dichlorobromomethane. The permit also contains monitoring

diemorooromomethane. The permit also contains momen

requirements for cyanide and chloroform.

Eel River Dischargers

Facility: City of Willits Wastewater Treatment Facility

NPDES Permit #: CA0023060
Permit Expiration Date: 6/28/2006
Average Dry Weather Flow: 1.3 mgd
Peak Wet Weather Flow: 3.0 mgd

Description: Facilities consist of extended aeration, settling,

disinfection, and dechlorination. Secondary treated effluent is discharged into Broaddus Creek during the period from October 1 to May 14 when diluting stream flows are

available. During the period from May 15 to September 30,

treated and disinfected effluent is used for pasture irrigation. The facility is under a Regional Water Board Cease and Desist Order for not meeting the 1% dilution requirement. A new plant design, involving 110 acres of treatment ponds is planned.

SIP Monitoring:

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Facility: City of Rio Dell NPDES Permit #: CA0022748
Permit Expiration Date: 2/24/2005
Average Dry Weather Flow: 0.2 mgd
Peak Daily Flow: 1.3 mgd

Description: Wastewater receives primary clarification and secondary

treatment with rotating biological contactors. During the winter months, secondary clarifier overflow is disinfected and dechlorinated prior to discharge to the Eel River. Wastewater is discharged to a percolation pond on a

shallow gravel bar during summer months. The percolation ponds may be experiencing problems, as indicated by the

detection of effluent in the river in dry weather.

SIP Monitoring: TetraTech is conducting a reasonable potential analysis of the results of

sampling for priority toxic pollutants. It is due to be completed on

April 22, 2005.

Facility: Redway Community Services District

NPDES #: CA0022781
Permit Expiration Date: 2/24/2005
Average Dry Weather Flow: 120,000 gpd

Description: Wastewater receives secondary treatment in an oxidation

ditch followed by a clarifier. Clarified overflow is disinfected and dechlorinated prior to discharge to the South Fork Eel River. During the summer wastewater is discharged to a series of upland percolation ponds located on a high bluff above Leggett Creek. There is essentially no

discharge, except in emergencies.

SIP Monitoring: TetraTech is conducting a reasonable potential analysis for priority

toxic pollutants. It is due to be completed on April 1, 2005.

Facility: Covelo Community Services District

NPDES Permit #: CA0023574
Permit Expiration Date: 2/24/2005
Average Dry Weather Flow: 80,000 gpd
Peak Daily Flow: 384,000 gpd

Description: Facilities include a sewage collection system, four

oxidation ponds followed by filter beds, disinfection, and dechlorination. Treated effluent is discharged to Grist Creek during wet winters. During dry weather months evaporation and percolation are sufficient to prevent

discharge to surface waters.

SIP Monitoring: This facility has not submitted priority pollutant data as requested in 2003.

Facility: City of Ferndale Wastewater Treatment Facility

NPDES Permit #: CA0022721
Permit Expiration Date: 11/29/2005
Average Dry Weather Flow: 250,000 gpd
Peak Daily Flow: 2.7 mgd

Description: The wastewater receives secondary treatment in a mechanically aerated

pond system. Pond overflow is chlorinated prior to discharge to Francis Creek near its confluence with the Salt River. Francis Creek is highly sedimented, resulting in major problems meeting the 100:1 discharge limitation. During summer months wastewater is used to

irrigate dairy pasture.

SIP Monitoring: A Reasonable Potential Analysis indicates that the facility

has the potential to exceed CTR criteria for copper, lead,

mercury, nickel, silver, zinc, 2,3,7,8, TCDD,

chlorodibromomethane, dichlorobromomethane, bis (2-

Ethylhexyl) Phthalate, and Alpha-BHC.

Facility: Loleta Community Services District Wastewater Treatment Facility

NPDES Permit #: CA0023671
Permit Expiration Date: 100,000 gpd

Description: Facilities include an aeration basin, clarifier, sludge storage

vault, chlorine contact chamber, chlorine and sulfur flow-proportioning equipment, and an evaporation/percolation pond. Discharge is to an evaporation/percolation pond that, during periods of high rainfall, overflows to an unnamed slough, which is tributary to the Eel River. The facility is

in the process of working to upgrade its sources of infiltration and inflow during rainstorms.

inflittation and inflow during rainstorms.

SIP Monitoring: TetraTech is conducting a reasonable potential analysis of the results of

sampling for priority toxic pollutants. It is due to be completed by

February 11, 2005.

Facility: Pacific Lumber Company, Scotia Mill and Town of Scotia

NPDES Permit #: CA0006017 Permit Expiration Date: 8/25/2004

Average Dry Weather Flow: Not specified in WDR Order

Description: Most of the wastewater stemming from industrial activities

is discharged into a large log pond. The log pond also receives disinfected effluent from the Scotia secondary level sewage treatment plant and yard runoff. Following periods of rainfall, the log deck overflows through a

clarifier into the Eel River.

SIP Monitoring: A Reasonable Potential Analysis indicates that there is no reasonable

potential for exceedance of CTR criteria.

Facility: City of Fortuna Wastewater Treatment Facility

NPDES Permit #: CA0022730
Permit Expiration Date: 4/26/2006
Average Dry Weather Flow: 1.0 mgd

Peak Wet Weather Flow: 5.0 mgd

Description: Wastewater is treated to secondary treatment standards

using an activated sludge process. Secondary clarifier effluent is chlorinated and dechlorinated prior to discharge to the Eel River at the confluence with Strongs Creek. Wastewater is discharged to a percolation pond on an

exposed gravel bar during the summer months.

SIP Monitoring: Tetra Tech is conducting a reasonable potential analysis of the results

of sampling for priority toxic pollutants. It is due to be completed by

March 11, 2005.

Mad River Dischargers

Facility: McKinleyville Community Services District Wastewater Treatment

Facility

NPDES Permit #: CA0024490
Permit Expiration Date: 6/28/2006
Average Dry Weather Flow: 0.90 mgd

Description: The biological treatment capacity of the ponds is 1.18 mgd

and the hydraulic capacity of the disinfection facilities is approximately 3.3 mgd. The facility includes two primary oxidation ponds and three secondary oxidation ponds. Treated wastewater is disinfected and discharged to the Mad River during winter months. During the summer months and low-flow periods of the Mad River, treated wastewater is discharged into two percolation ponds and is

irrigated on dairy pastures.

SIP Monitoring: Monitoring for priority toxic pollutants has been conducted. A cursory

review of the data indicates that the facility has the potential to exceed CTR criteria for copper, mercury, bis (2-Ethylhexyl) Phthalate, Alpha-

BHC, 4,4'-DDT, and possibly chloroform.

Facility: State of California Department of Fish and Game Mad River Fish

Hatchery

NPDES Permit #: CA0006670
Permit Expiration Date: 4/27/2005
Maximum Flow: 19.39 mgd

Description: The Permittee obtains water directly from the Mad River

and from a series of wells adjacent to the river. A biological filtration system allows recirculation of the major portion of the flow through the production ponds. Fish wastes and wastewater generated by the hatchery raceway cleaning and filter backwashing is discharged to

two evaporation/percolation ponds.

SIP Monitoring: Monitoring for priority toxic pollutants has been conducted. A cursory

review of the data indicates that the facility has the potential to exceed

CTR criteria for mercury and bis (2-Ethylhexyl) Phthalate.

Facility: Simpson Timber Company, Korbel Sawmill and

Woodwaste Disposal Site Class III Waste Management

Unit

NPDES Permit #: CA005932 Permit Expiration Date: 5/16/2007

Maximum Flow: Not quantified. The facility is a minor discharger as defined in 40CFR

122.21(j)

Description: Wastewater generated by storm water runoff and recycled

> log deck sprinkle water and by storm water runoff that has contacted lumber, wood chips, and bark from a mill yard, discharges during the wet season to the North Fork Mad River after routing through settling basins and a constructed

wetland.

SIP Monitoring:

Humboldt Bay Dischargers

College of the Redwoods Wastewater Treatment Facility Facility:

NPDES Permit #: CA0006700 Permit Expiration Date: 1/26/2006 Design Flow: 100,000 gpd

Description: Discharge is an almost-dry channel tributary to Humboldt Bay

Monitoring for priority toxic pollutants has been conducted. SIP Monitoring:

> A cursory review of the data indicates that the facility has the potential to exceed CTR criteria for copper, lead, silver,

carbon tetrachloride, chlorodibromomethane,

dichlorobromomethane, bis (2-Ethylhexyl) Phthalate, and

possibly chloroform.

The City Arcata Wastewater Treatment Plant Facility:

NPDES Permit #: CA0022713 6/23/2009 Permit Expiration Date: Average Dry Weather Flow: 2.3 mgd Peak Wet Weather Flow: 5.0 mgd

Description: The facility was designed as a tidal enhancement project. The primary

treatment process includes mechanical barscreens, grit removal, two clarifiers, two anaerobic digesters, sludge drying beds, and a sludge composting operation. The effluent is disinfected with chlorine and dechlorinated with sulfur dioxide prior to discharge to a tidal area in Arcata Bay. Secondary treatment is accomplished by the use of about 60 acres of oxidation ponds followed by three treatment marshes. Flows in excess of 5.0 mgd bypass the primary system and are routed

directly to the oxidation ponds.

SIP Monitoring: Monitoring for priority toxic pollutants has been conducted. A

reasonable potential analysis indicates that the facility has the potential to exceed CTR criteria for copper, zinc, cyanide, and 2,3,7,8 TCDD.